## **Encapsulation Resins**

# Technical Data Sheet



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# **ER2219 Epoxy Resin**

ER2219 is a semi-thixotropic, heat cure, one-part epoxy designed specifically for use as a dipping resin for hybrid circuits and discrete components. ER2219 is also flame retardant.

- Single-part, semi-thixotropic epoxy; ideal for protecting discrete components on PCBs
- Flame retardant resin with high ionic purity; low ionisable chlorine content
- Can also be used as a dipping resin; versatile in use
- Quick cure at elevated temperatures; promotes efficient production processes

RoHS Compliant (2015/863/EU): Yes **Approvals** 

**UL Approval:** Meets UL94 V-0

### **Typical Properties**

Usable Life 6 months @ 20°C Liquid Properties:

6 weeks @ 40°C

For extended usable life, store refrigerated -

Allow to return to ambient temperature before use. Cure Time

40 minutes @ 90°C

30 minutes @ 100°C

15 minutes @ 120°C

Density (g/ml) 1.16

Viscosity @ 23°C (mPa s) 22,900 Ionisable Chlorine Level (ppm) 280

**Cured Properties:** Shore D Hardness 75

> Operating Temperature Range (°C) -40 to +120

Water Absorption (7 days @ 23°C) 1.0% Dielectric Strength (kV/mm) 12 Dielectric Constant @ 20°C, 50Hz 4.0 Loss Tangent 0.03 1%

Weight Gain (3 hours in boiling water) Glass Transition Temperature (°C) 80

Meets UL94 V-0 Flame Retardancy

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All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification.

Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

Ashby Park, Coalfield Way, Ashby de la Zouch, Leicestershire LE65 1JR T +44 (0)1530 419 600 F +44 (0)1530 416 640 BS EN ISO 9001:2008 Certificate No. FM 32082





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### **Directions for Use**

ER2219 is a single-part epoxy. It can be applied via syringe or automated equipment to protect localised areas and discrete components on PCBs. Alternatively, it can be used as a dipping resin. Once applied the product can be heat cured using the guidelines given above. It is not advised to heat prior to application in case of premature curing.

#### General

Sedimentation of the resin has been minimised by careful attention to the formulation. However, any sediment which may have occurred over long periods of time must be dispersed before removing any material from the container. This dispersion can be carried out (if necessary) by stirring with a broad bladed spatula or gently rolling the can. Take care not to introduce excessive amounts of air during this operation or it may be necessary to re-evacuate the resin. Sedimentation will be accelerated by storage at high temperatures. Sedimentation found in resin packs forms no problem since the sediment is re-mixed when the pack is used.

### **Additional Information**

**Cleaning:** It is far easier for machines & containers to be cleaned before the resin has been allowed

to cure. Electrolube's RRS is suitable for cleaning machines and containers and cured

resin may be slowly softened and removed by soaking in our RRS.

**Storage:** Please refer to storage conditions and useable life data provided above.

Health & Safety: Always refer to the Health & Safety data sheet before use. These can be downloaded

from www.electrolube.com

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